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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,253	07/15/2003	Darko Kirovski	MS1-356USC1	9756

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EXAMINER	
SELLERS, DANIEL R	
ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,253	KIROVSKI ET AL.	
	Examiner	Art Unit	
	Daniel R. Sellers	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,22,23,26,33,34,37-39,42 and 44-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,22,23,26,33,34,37-39,42 and 44-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4, 22, 23, 26, 33, 34, 37-39, 42, and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookson as applied to claim 37 above, and further in view of Bloom.

4. Regarding claim 1, see Cookson

An audio watermarking system comprising:
a pattern generator configured to generate both a strong watermark and a weak watermark; (Col. 4, lines 3-7) *and*
a watermark insertion unit configured to selectively insert either the strong watermark or the weak watermark into segments of the audio signal, so that resulting segments have either the strong or the weak watermark inserted therein, but not both. (Col. 4, lines 37-43 and lines 64-66).

Cookson teaches a copy protection system, which can detect a weak and a strong watermark in an audio file. It is inherent that a system has inserted either a weak or strong watermark, but not both according to Cookson's teachings.

Cookson also teaches that the watermarks may be selectively placed in the audio file, according to another embodiment only one watermark exists per file (Col. 4, line 64 – Col. 5, line 27 and Col. 9, lines 26-36). Further Cookson teaches that the weak and the strong watermark occupy different segments of the audio signal. The

weak watermark is destroyed by compression (digital compaction), an A/D conversion, or a D/A conversion and the strong watermark survives these different processing techniques (Col. 4, lines 37-43 and Col. 6, lines 44-49). It is understood that the strong watermark must be located in a different manner if it is to survive the compression process.

Cookson does not specifically teach that the portions, or segments, are temporal or frequency segments. However, Bloom does teach the insertion of watermarks, which are disjoint from each other in one of a spatial, temporal, or transform domain (e.g. a frequency domain via a Fourier Transform) (Col. 5, lines 53-61). Bloom also teaches that an audible measure is used (Col. 6, lines 40-42). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Cookson and Bloom for the purpose of retaining the perceived audio quality of the source.

5. Regarding claim 4, the further limitation of claim 1, see Cookson column 3, lines 8-12. Cookson teaches a system that is an operating system.

6. Regarding claim 22, see the preceding arguments with respect to claims 1 and 17. Cookson teaches the watermark encoder, where the weak watermark is inserted in the least significant bits (LSB) and the strong watermark is not. Cookson further teaches the watermark detector. Bloom teaches the temporal or frequency segments.

7. Regarding claim 23, see the preceding arguments with respect to claim 1. Cookson teaches a separate watermark detector, which is used on a client side, and a watermark encoder, which is used by the audio content publisher (Col. 3, lines 38-42).

8. Regarding claim 26, see the preceding argument with respect to claim 1. Cookson teaches that the strong and weak watermarks are in separate segments. Bloom teaches the temporal or frequency portions.

9. Regarding claim 33, see the preceding argument with respect to claim 1. Cookson teaches these features. Bloom teaches the temporal or frequency portions.

10. Regarding claim 34, Cookson teaches a system with these features, which inherently uses computer readable medium (Col. 5, lines 43-44). Bloom teaches the temporal or frequency portions.

11. Regarding claim 37, see the preceding argument with respect to claim 1. Cookson teaches a system for detecting the presence of weak and/or strong watermarks. It is inherent that a system created these watermarks, and it is inherent that they are contained within separate segments, because the weak watermark is destroyed by compression whereas the strong watermark is not. Bloom teaches the temporal or frequency segments.

12. Regarding claim 38, the further limitation of claim 37, see Bloom

... wherein the watermark insertion unit selectively chooses segments for insertion of the watermarks according to an audible measure of the segments. (Col. 3, lines 14-21, Col. 5, lines 53-61, and Col. 6, line 66 – Col. 7, line 8).

13. Bloom teaches a method for watermark insertion. Bloom teaches the insertion of two different watermarks, which are disjoint from each other in one of a spatial, temporal, or transform domain (e.g. a frequency domain via a Fourier Transform). Bloom teaches that an audible measure is used (Col. 6, lines 40-42). However Bloom does not teach of a weak watermark. Cookson teaches a watermark detection system,

which detects the presence of a weak and/or strong watermark. Cookson does not teach that an audible measure is used for inserting a watermark.

14. Regarding claim 39, the further limitation of claim 37, see the preceding argument with respect to claim 38. The combination of Cookson and Bloom teach this feature.

15. Regarding claim 42, see the preceding argument with respect to claim 4. Cookson teaches these features on an operating system.

16. Regarding claim 44, the further limitation of claim 1, see the preceding argument with respect to claim 38. The combination teaches that the watermarks are disjoint and avoid interaction with each other. The combination teaches that the watermarks can be placed in one of a spatial, temporal, or transform domain, wherein the frequency domain is a transform domain.

17. Regarding claim 45, the further limitation of claim 22, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

18. Regarding claim 46, the further limitation of claim 26, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

19. Regarding claim 47, the further limitation of claim 33, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

20. Regarding claim 48, the further limitation of claim 34, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

21. Regarding claim 49, the further limitation of claim 37, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

Response to Arguments

22. Applicant's arguments filed October 28, 2005 have been fully considered but they are not persuasive. See the preceding rejections under 35 USC 103. The prior art teaches that watermarks are stored in separate segments, such as different temporal or frequency segments.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS

HUYEN LE
PRIMARY EXAMINER